

Dobutamine stress MRI scan preparation

A patient's guide

Your doctor has requested that you have a stress MRI scan of your heart. For your information and in preparation for this appointment please read the details below carefully.

A stress MRI is a standard MRI scan of your heart; however, part of the scan will involve an intravenous infusion of a drug (dobutamine) that increases the workload of your heart.

If you currently have any kidney function impairment or have had or are awaiting a liver transplant please call to let us know.

Failure to comply with these instructions may cause inaccurate results and it may not be possible to perform your scan.

We also request you bring a list or a repeat prescription print-out of all your current medications with you.

Before the test

If you are taking any beta-blocker drugs, you should **stop** them for 24 hours prior to your scan and on the morning of the examination. Commonly prescribed beta-blockers include:

- Atenolol
- Metoprolol
- Propranolol
- Sotalol
- Carvedilol
- Bisoprolol

Beta-blocker-containing eye-drops for glaucoma may still be taken.

You should avoid taking drugs containing nitrates (commonly used in patients with angina) for the 24 hours preceding the scan.

Commonly prescribed nitrates include glyceryl trinitrate (GTN) (eg Coro-Nitro Pump spray, Glytrin spray), isosorbide mononitrate (eg Cibral, Elantan, Isotard), isosorbide dinitrate (eg Isordil, Sorbitrate) and Nicorandil.

If you are taking a drug called Ivabradine, please stop 24 hours prior to your scan.

Take all other medications as instructed by your doctor. You may eat a normal diet and you may drink fruit juice, squash, milk and water. ***However please do not eat or drink anything for four hours prior to this test.***

Diabetic patients may have a light meal two hours before the test.

The day of the test

The test takes about 60 to 90 minutes. Please allow at least two to three hours from the time you arrive to the time you leave.

You will be asked to change into a hospital gown and remove all metal objects, jewellery, dentures and hearing aids. You do not need to remove your wedding ring.

Before the test starts, you will be asked questions about your medical history and the medication(s) you are taking.

This is to make sure it is safe for you to have an MRI scan. The procedure will also be explained to you.

An electrocardiogram (ECG) will be taken. This is a recording of your heartbeat on paper.

An intravenous (IV) line will be placed in to your arms by a radiographer.

You will be asked to lie on a table that goes into the MRI scanner.

The test is fundamentally safe although in extreme and very rare cases a very small number of patients have been known to experience some reaction to the medication.

You will be carefully screened for your suitability to undergo the test and closely monitored throughout.

During the test

During the first 20 to 30 minutes, pictures will be taken to observe how your heart is working.

Your heart will be stressed with a medication called dobutamine. This medication affects your heart in a manner similar to exercising, by increasing the workload of your heart. A doctor will be present in the scanning area while the medication is given.

The dobutamine infusion will begin at a dose determined by your weight. Approximately every three minutes the infusion rate will be increased. At each infusion rate MR images of your heart will be obtained and compared with the resting images. When a wall motion contraction abnormality is detected or your target heart rate (based on your age) is reached, the dobutamine will be stopped.

The overall time for the infusion part of the scan can take up to 30 minutes. The medication will be stopped if you develop severe chest pain, severe shortness of breath

or major changes in your heartbeat. After stopping the medication, any symptoms you are feeling will wear off very quickly. Rarely will you need medication to stop any chest pain, shortness of breath or major changes to your heartbeat.

While your heart is stressed you will be given a contrast agent called gadolinium and pictures will be taken of your heart. This helps show areas of abnormal blood flow in your heart. After a short break, more pictures will be taken to look for any scarring of the heart muscle.

During the test, you will hear knocking sounds as the machine takes the pictures. We will also prompt you with instructions. For example, we may ask you to hold your breath for eight to ten seconds. It is important for you to stay as still as possible because movements can create blurring of the pictures.

At the end of the test your IV lines will be removed.

After the test

After the scan you may feel tired for the next 2-3 hours and we usually advise you have something to eat or drink before returning home. If possible, we advise not driving immediately after the test.

You may resume your normal activity unless your doctor tells you differently.

Take your regular medications as directed unless your doctor tells you differently.

The test results will be sent to the doctor who ordered the test.

Keep any scheduled follow-up appointments with your doctor.

Contact

If you have any questions or queries regarding your scan, or any of the information provided in this leaflet, please call 01480 364843.

Email: MRI@papworth.nhs.uk

Parking

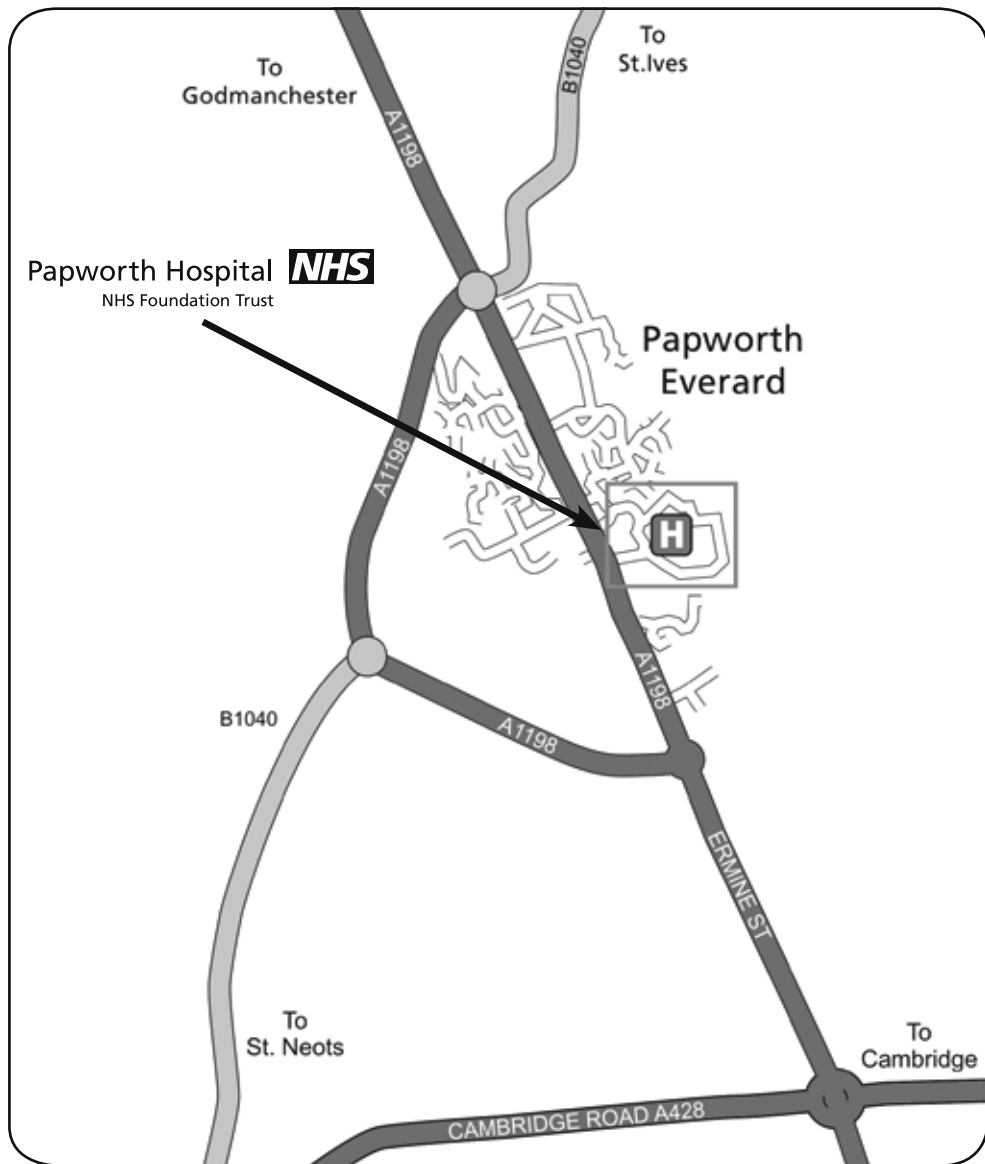
Car parking charges are in place at Papworth Hospital. All patients and visitors parking on the site will need to display a parking ticket or appropriate permit. Signs around the hospital will show you where patients and visitors may park ('pay and display').

Charges apply from 7.00am to 8.00pm every day.

Tickets are valid for a full 3, 5 or 24 hour period. Time not used by 8.00pm on day of issue will carry forward to the next day.

Weekly/monthly tickets can be purchased from the Car Park and Patient Travel Office, located by the hospital Main Reception. Patients or visitors who attend Papworth frequently usually find these are more cost-effective than buying shorter-term tickets.

Spaces for blue badge holders are provided close to entrances to the various hospital buildings and these are free of charge. Blue badges must be displayed at all times.



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